## (19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 7 July 2005 (07.07.2005)

**PCT** 

## (10) International Publication Number WO 2005/060994 A1

(51) International Patent Classification<sup>7</sup>:

A61K 39/00

(21) International Application Number:

PCT/NL2004/000892

(22) International Filing Date:

21 December 2004 (21.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

03079161.0

23 December 2003 (23.12.2003) EP

- (71) Applicant (for all designated States except US): NED-ERLANDSE ORGANISATIE VOOR TOEGEPAST-**NATUURWETENSCHAPPELIJK ONDERZOEK** TNO [NL/NL]; Schoemakerstraat 97, NL-2628 VK Delft (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KOPPELMAN, Stefan, Johan [NL/NL]; Kerklaan 53, NL-3731 EG De Bilt (NL). PENNINKS, Andreas, Hendrikus [NL/NL]; Moerasmos 1, NL-3904 BV Veenendaal (NL). KNIPPELS, **Léon, Mathieu, Johannes** [NL/NL]; Noordeindestraat 31, NL-3523 VJ Utrecht (NL).

- (74) Agent: WINCKELS, J.H.F.; Johan de Wittlaan 7, NL-2517 JR Den Haag (NL).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## **Published:**

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

54) Title: IMMUNOTHERAPY FOR FOOD ALLERGY BY REDUCED AND ALKYLATED FOOD ALLERGENS

(57) Abstract: The invention relates to a treatment of human individuals suffering from food allergy. The treatment involves a specifically modified food allergen and is based on immunotherapy. The modified allergen is derived from a dietary protein, preferably a tree nut protein and is modified by reduction and alkylation.